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Number 1114

Containers in Common Use for Selected Fresh Fruits and Vegetables Exported to Western Europe

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ABSTRACT

Bongers, Anton J., Hillebrand, Ben M., and Risse, Larry A. 1981. Containers in common use for selected fresh fruits and vegetables exported to western Europe. U.S. Department of Agriculture, Marketing Research Report 1114, 17 pp.

The proliferation of containers for fresh fruits and vegetables exported to Europe has resulted in an enormous number of container sizes with many variations in construction and accessory packaging materials.

A survey made in major western European terminal markets showed that 301 different containers were used for the packaging of 30 selected fresh fruits and vegetables. Containers found in the survey were made of wood (43.5 percent), corrugated fiberboard (51.8 percent), solid fiberboard (1.3 percent), expanded plastic (0.7 percent), nonexpanded plastic (1.3 percent), jute (1.0 percent), and composites (0.3 percent).

Of the wooden containers, 55.7 percent were constructed as trays, 38.2 percent as boxes, and 6.1 percent as crates. Boxes accounted for 91.3 percent of containers constructed from fiberboard and the remaining 8.7 percent were trays. One box and one tray were made of expanded plastic. The nonexpanded plastic and the jute containers were bags. The one composite container was a tray.

Accessory packaging materials were used in 71.8 percent of the containers surveyed. The product was place packed in 80.4 percent of the containers, and the remaining 19.6 percent were jumble packed. Their net weight varied considerably within and among the commodities.

External length and width dimensions for fresh fruit and vegetable containers are recommended by the Organization for Economic Cooperation and Development (OECD) for the purpose of international standardization. This study shows that 30.3 percent of the containers were within the OECD recommendations.

KEYWORDS: Containers, exports to western Europe, fresh fruits, fresh vegetables, packaging, packaging accessories.

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Issued April 1981

CONTAINERS IN COMMON USE FOR SELECTED FRESH FRUITS AND VEGETABLES EXPORTED TO WESTERN EUROPE

By ANTON J. BONGERS, BEN M. HILLEBRAND, and LARRY A. RISSE[1]

Packaging is a universal need. There is scarcely a product - especially fresh - that cannot or should not be in some kind of a container.

The international trade of fresh fruits and vegetables has expanded considerably over the last decades and is expected to continue. Marketing requirements, such as size regulations, labeling, and product presentation for packaged produce, have become stricter and have led to innovation in the packaging of fresh fruits and vegetables. Produce has been and is currently packaged and shipped in containers of a wide variety of sizes and construction.

Surveys conducted to catalog the different packaging used for produce in Europe (*3*)[2] and the United States (*2*, *8*) show a proliferation of size and type of containers. There are many reasons to justify the use of different size containers. However, modern handling systems require standardization of containers, not only for a single commodity but for all commodities.

The objective of this survey was to catalog nonreturnable containers used for marketing selected fresh fruits and vegetables exported to western Europe. This survey was conducted to inform the U.S. produce industry on packaging of fresh produce used by non-U.S. suppliers to western Europe. Information presented here will aid in improving the design of containers for the successful marketing of U.S. fresh produce in Europe.

PROCEDURES

Shipping containers for 30 selected fresh fruits and vegetables were surveyed in 4 major wholesale markets serving London, England, Paris, France, Hamburg, Germany, and Rotterdam, the Netherlands. These four markets can be considered representative for the trade in fresh produce in western Europe.

This survey was conducted in the summer, fall, and winter of 1975.[3] Other containers could have been used to market the surveyed fresh fruits and vegetables in western Europe, but they were not on the particular markets at the time this study was made.

Data were collected by country of origin on the different types, styles, and sizes of containers in common use for fresh fruits and vegetables. Differences in container types and styles mean variation in design and construction materials. Containers were classified by type and style according to figure 1.

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[2] Italic numbers in parentheses refer to Literature Cited, p. 8.

[3] Although the research was conducted in 1975, the findings are still valid and useful. A heavy workload and limited personnel have delayed publication of this study until now.

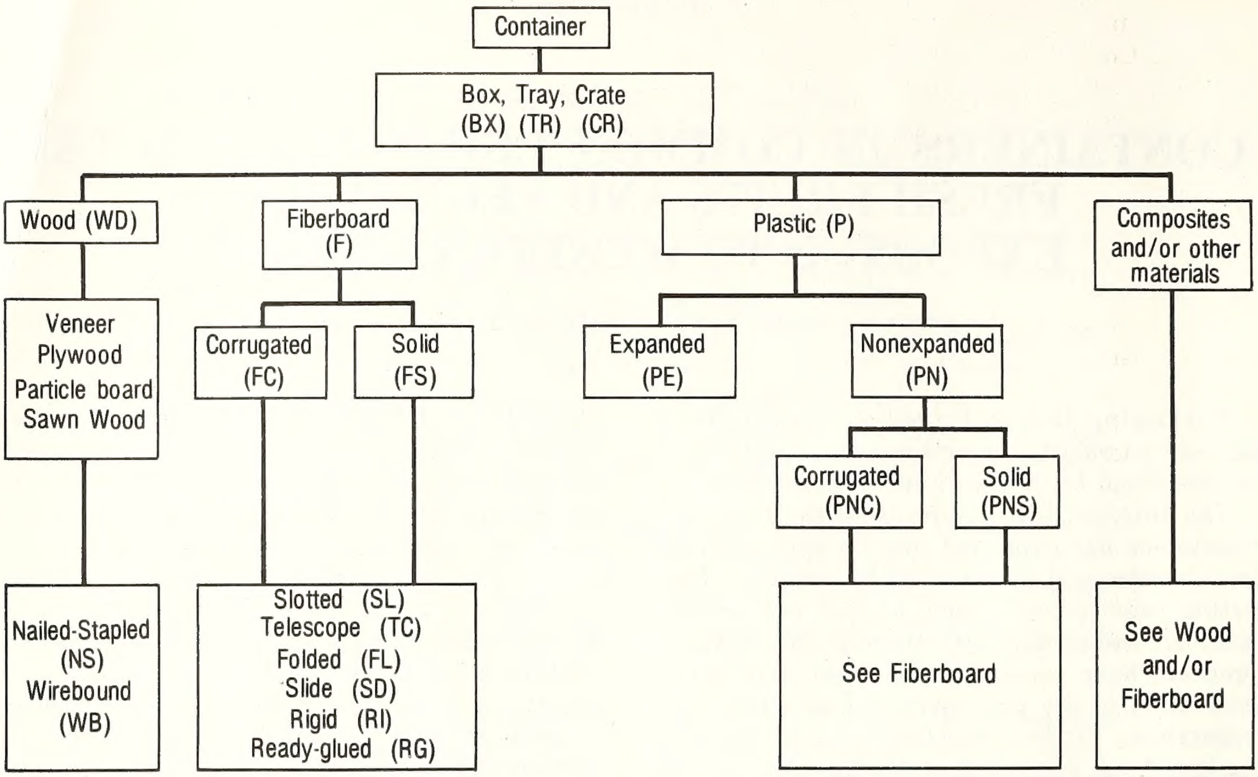
Container
Box, Tray, Crate (BX) (TR) (CR)
Wood (WD)
Fiberboard (F)
Plastic (P)
Composites and/or other materials
Veneer Plywood Particle board Sawn Wood
Corrugated (FC)
Solid (FS)
Expanded (PE)
Nonexpanded (PN)
Corrugated (PNC)
Solid (PNS)
Nailed-Stapled (NS) Wirebound (WB)
Slotted (SL) Telescope (TC) Folded (FL) Slide (SD) Rigid (RI) Ready-glued (RG)
See Fiberboard
See Wood and/or Fiberboard

FIGURE 1.— Classification of fresh fruit and vegetable containers.

Definitions of types, styles, pack arrangement, and packaging accessories are listed in the glossary (appendix). Differences in size refer to outside dimensions of more than plus or minus 1 cm.

Materials used in the construction of each container and for the packaging accessories were described. The arrangement of the product was recorded as place or jumble pack.

Gross weights were calculated from the average gross weight of three containers, and tare weights were determined by the average weight of three empty containers complete with accessory materials. Net weights were computed by subtracting the tare weight from the gross weight.

The dimensions are the average of three individual containers for each size or type found in the survey. Base outside and inside dimensions were measured 3 cm from each corner of the bottom or top of the containers, respectively.

CONTAINERS COMMONLY USED

The containers used to ship a given commodity vary from country to country and many times within a country. Regulations of some exporting and importing countries have a great impact on container size, type, and construction. Availability and cost of materials in the producing areas also have an important role in the choice of container construction material. Modern handling systems require standardized dimensions. Transport vehicle sizes are becoming more standardized. The efficient use of their cargo space requires that packaging be properly interfaced with the transport vehicle.

This report includes the containers that appeared on the wholesale markets of London, Paris, Hamburg, and Rotterdam. Table 1 (appendix) includes the containers by commodity and country of origin. The countries are ranked by their importance of exports to the European Economic Community (EEC) (7) except where noted. It is impossible to survey all the different containers used by various shippers in different countries for different products at different times. In many instances, no particular container predominates. In others, when regulations are enforced by exporting or importing countries, one container is nearly identifiable with a given product.

Fresh Fruits

A major part of the domestic fresh fruit in western European countries is shipped in returnable packaging. Fresh fruit for export is largely shipped in nonreturnable packaging. Nonreturnable packaging used for various fresh fruits is described in table 1.

Apples - Twenty-two different apple containers were found to have originated from 9 countries. Corrugated fiberboard predominated as the construction material. Liners were used in most of the wooden containers, whereas wrappers, dividers, and interior trays were generally used in the corrugated fiberboard containers. Containers with a net weight between 18.0 and 20.0 kg were most common on the markets.

Avocados - Four countries exported avocados in eight different containers. All were of corrugated fiberboard. Packaging accessories were used in all containers, and all avocados were place packed. Net weight ranged from 2.7 to 7.5 kg, with six containers weighing between 3.0 and 4.5 kg. The outside dimensions were fairly consistent.

Cherries - Six different containers originated from four countries. Three came from Italy, which supplies about 50 percent of the EEC cherry market. Five of the six containers were of wood and one of corrugated fiberboard. Liners were used in five containers and two had pads. The average net weight was 4.9 kg.

Grapefruit - Ten countries used 14 different containers to market grapefruit in western Europe. Ten containers were of corrugated fiberboard, with the telescoping style predominating, and 4 were of wood. Fruit was place packed in all containers, and wrappers were used in six of them. Net weight of the containers varied from 12.5 to 18.3 kg, with an average of 15.6 kg.

Grapes - Three different containers were used to market grapes from both Italy and France, two each from Spain and South Africa, and one each from Greece, Romania, the Netherlands, and Israel (fig. 2). Wood containers predominated and accounted for 11 of the 14 surveyed. Most were the tray type with liner. Grapes were place packed in all of them. The most common net weight was about 5 kg per container.

Lemons - Lemons were marketed in 23 containers originating from 8 countries. Sixteen were of corrugated fiberboard and 7 of wood. All lemons were place packed. Wrappers were used in 18 containers, liners in 2, dividers in 2, and net bags in 1. The net weight varied from 5.2 to 18.8 kg, with the highest frequency between 14 and 16 kg.

Limes - Containers for marketing limes came from six countries. All were of corrugated fiberboard. One container was jumble packed and the rest were place packed. The net weight varied from 2.5 to 13.4 kg.

Mandarins - Three wood and two corrugated fiberboard containers from three countries were surveyed. Accessory packaging material was used in all of them. All mandarins were place packed, with a net weight from 7.5 to 11.1 kg per container.

Nectarines - Four different containers were found during the survey to market nectarines. Three of them were of wood and one of corrugated fiberboard. Net weight ranged from 2.1 to 5.0 kg.

Oranges - Spain is the major exporter of oranges to the EEC and Israel ranks second. Six different containers were used to market oranges from Spain (fig. 3), two each from Israel, Morocco, Algeria, and Tunisia, and one each from South Africa, Italy, Brazil, Cyprus, Greece, and Egypt. Corrugated fiberboard accounted for 8 of the 20 containers surveyed and wood for the other 12. Wraps were used in 16 containers and liners in 6. All were place packed except one was jumble packed. Net weight varied from 8.6 to 28.9 kg, with most between 14.0 and 17.0 kg.

Peaches - Seven containers were identified, of

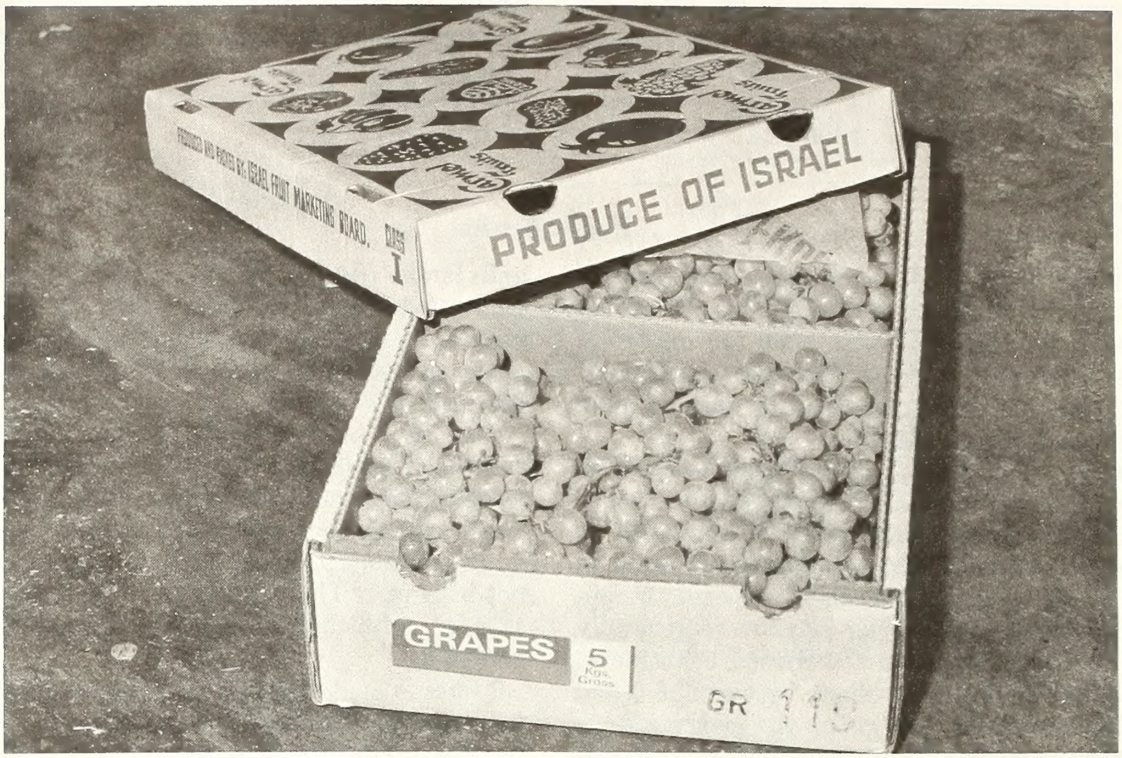

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Figure 2.— Typical Israeli box used for grapes. Various Israeli products are marketed in boxes of similar type and construction.

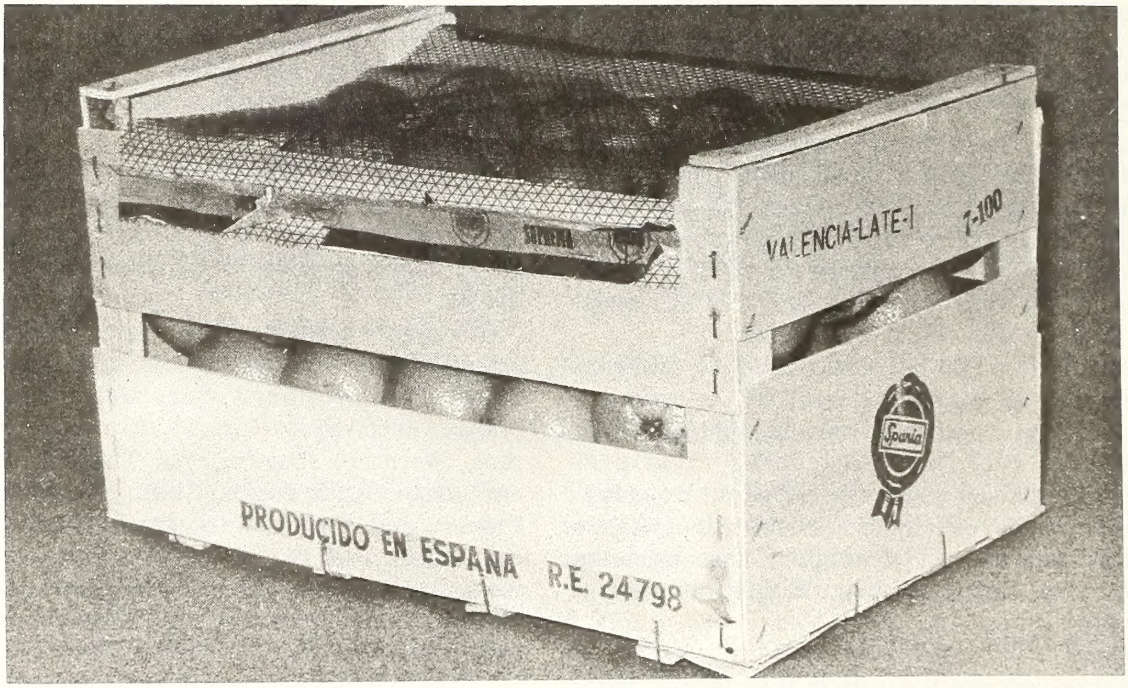

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Figure 3.— Typical Spanish orange box, usually place packed, with some fruit individually wrapped. Most Spanish oranges are exported in this type of box.

which five were of wood. The tray type predominated, and in most containers pads were used. All fruit was place packed. Average net weight was 3.6 kg.

Pears - Six of the ten pear containers were of wood and 4 of corrugated fiberboard. In six containers, liners were used to separate the product from the sides. Interior trays were used in four, pads in two, dividers in two, and in one container the fruit was individually wrapped. Most of it was place packed. Net weight ranged from 4.3 to 16.0 kg per container.

Plums - Ten out of eleven containers surveyed were of wood and 1 of corrugated fiberboard. Accessory packaging materials were used in most of them. Net weight ranged from 2.5 to 12.3 kg. In two containers the plums were packed in consumer units of 0.8 kg and 1.0 kg.

Strawberries - Of the 12 containers surveyed, 7 were of corrugated fiberboard, 3 of wood, 1 of expanded plastic, and 1 was a combination of corrugated fiberboard and nonexpanded solid plastic. All containers had cups, as consumer units of 250 or 500 grams indicated net weight. No liners, wrappers, or dividers were used. Net weight varied from 1.8 to 5.0 kg, mostly between 2 and 3 kg. (Fig. 4.)

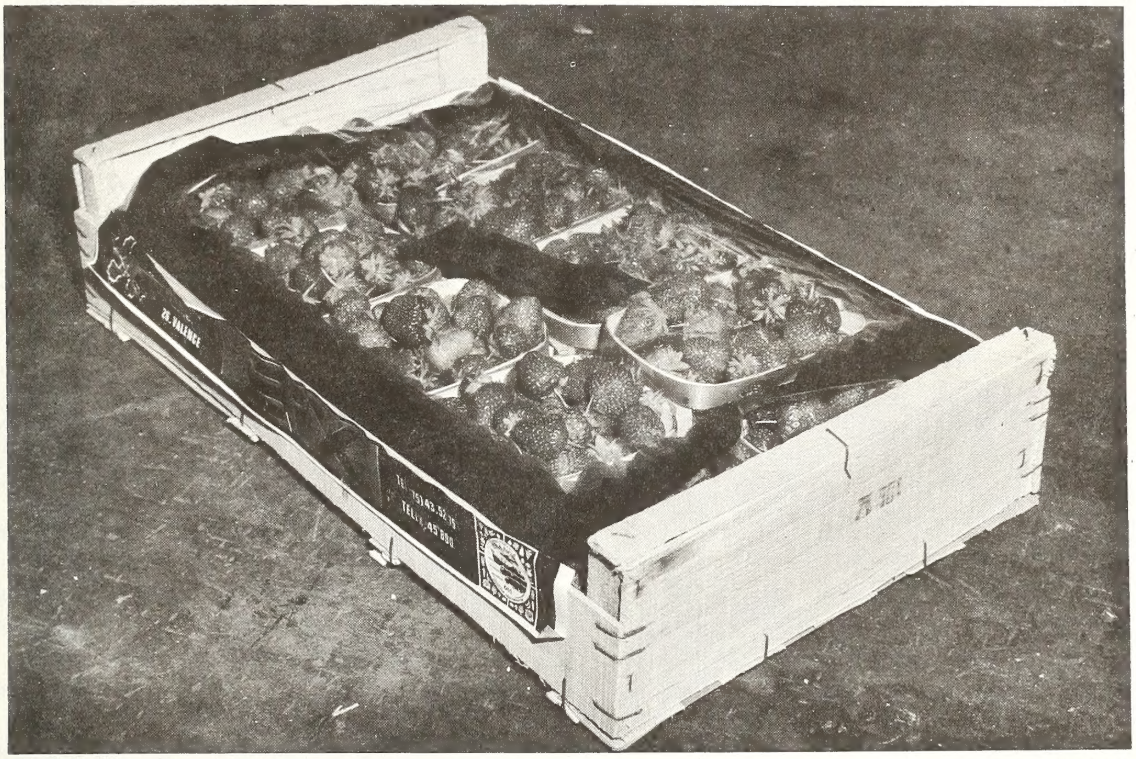

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FIGURE 4.— French strawberry tray. Strawberries and other soft fruits are usually marketed in western Europe in similar type trays. Prepacking berries in consumer units is very common.

Fresh Vegetables

Returnable packaging for fresh vegetables in western European countries is not extensively used. Especially in the northern part, nonreturnable packaging is used to market fresh vegetables domestically and for export. Different types of this packaging for a selected number of fresh vegetables are included in table 1.

Artichokes - Only containers from Spain, which supplies more than 70 percent of all artichokes imported into the EEC, were identified. The product was shipped in two different kinds of stapled wood crates with liners, and the product was place packed.

Asparagus - The major part of the EEC market (62.8 percent) is supplied with French asparagus. Three French and three English containers of wood and corrugated fiberboard were used to market asparagus. The asparagus was place packed and in some instances bundled per 500 grams. Net weight ranged from 3.6 to 13.5 kg per container.

Beans (green) – Italy, Spain, and the Benelux countries supply more than 80 percent of the total green beans in the EEC. Thirteen different containers were surveyed, of which 5 were of wood and 8 of corrugated fiberboard. Six containers had liners for added protection. All were place packed except one that was jumble packed. Their net weight varied from 2.5 to 9.8 kg, with an average of 5.4 kg.

Broccoli – Three different containers were identified to market broccoli during the survey. They were of wood and place packed.

Carrots – Carrot containers originated from four countries. Three were of wood, two of fiberboard, and two were plastic bags. All except one were jumble packed. The average net weight for carrots packed in containers was 10.7 kg. The bags contained 9.9 and 27.0 kg of carrots.

Cauliflower – Five different cauliflower containers from three countries were surveyed. Three were of wood and two of corrugated fiberboard. The product was place packed in the containers. Net weight varied from 6.4 to 21.7 kg.

Celery – Eight celery containers were surveyed, of which three were of wood and five of corrugated fiberboard. Individual stalks were sleeved in a polyethylene bag and place packed in the container. Lowest net weight was 7.4 kg and the highest 13.4 kg, with an average of 10.6 kg.

Chinese cabbage – Four different Chinese cabbage containers were identified; three were from Austria and one from Israel. Three were of corrugated fiberboard, either folded or telescoped. One container was a wood crate. The net weight ranged from 7.0 to 17.7 kg.

Eggplant – Seven countries marketed eggplants in the EEC in eight different containers. Two were of wood and six of fiberboard. Accessory packaging material was used in seven of them. All were place packed. The net weight ranged from 3.9 to 8.6 kg, with an average of 5.6 kg.

Muskmelons – Muskmelons were marketed in 14 different containers. Half were of wood and half of corrugated fiberboard. The European countries used mostly wooden trays to market melons and all other countries corrugated fiberboard boxes. In most wooden containers, the product was protected by pads. In the fiberboard boxes, dividers were frequently used. All containers were place packed. Net weight varied from 4.0 to 15.8 kg.

Onions – Dry onions observed during the survey were packed in five different mesh bags. Three were of jute and two of polyethylene. Net weight per bag ranged from 9.4 to 24.8 kg.

Peppers (hot) – Five different hot pepper containers were observed. Three were of corrugated fiberboard and two of wood. The containers were jumble packed. Net weight varied from 3.5 to 5.0 kg.

Peppers (sweet) – Italy is the largest supplier of sweet peppers (36.0 percent) to the EEC. Of the 25 containers surveyed, 4 came from Italy. Italian peppers are generally shipped in wooden trays or corrugated fiberboard boxes. Eighteen containers were of corrugated fiberboard, 1 of solid fiberboard, and 6 of wood. The product in 13 containers was place packed and in 12 jumble packed. Accessory packaging material was used in 7 of the 25 containers. Net weight varied from 2.9 to 12.6 kg, with an average of 5.5 kg. (Fig. 5.)

Radishes – Four different containers were identified, of which two were wooden trays, one a corrugated fiberboard tray, and one a corrugated fiberboard box. All radishes were packed in consumer units, either in bags or bunches. Net weight varied from 2.7 to 9.0 kg.

Tomatoes – Tomato containers have perhaps the greatest proliferation of types and sizes. Twenty-three different containers originated from 9 countries. Eleven were of wood and 12 of corrugated fiberboard. Liners, dividers, or both were used in 12 of the containers surveyed. In four containers the tomatoes were individually wrapped, and pads were used in seven. Fifteen were place packed and the remainder jumble packed. Net weight varied from 3.5 to 10.1 kg, with 14 containers holding between 5.0 and 6.0 kg of tomatoes. (Fig. 6.)

Watermelons – One wooden and five corrugated fiberboard watermelon containers were found on the markets. All had either dividers or pads. Net weight varied from 10.7 to 20.6 kg.

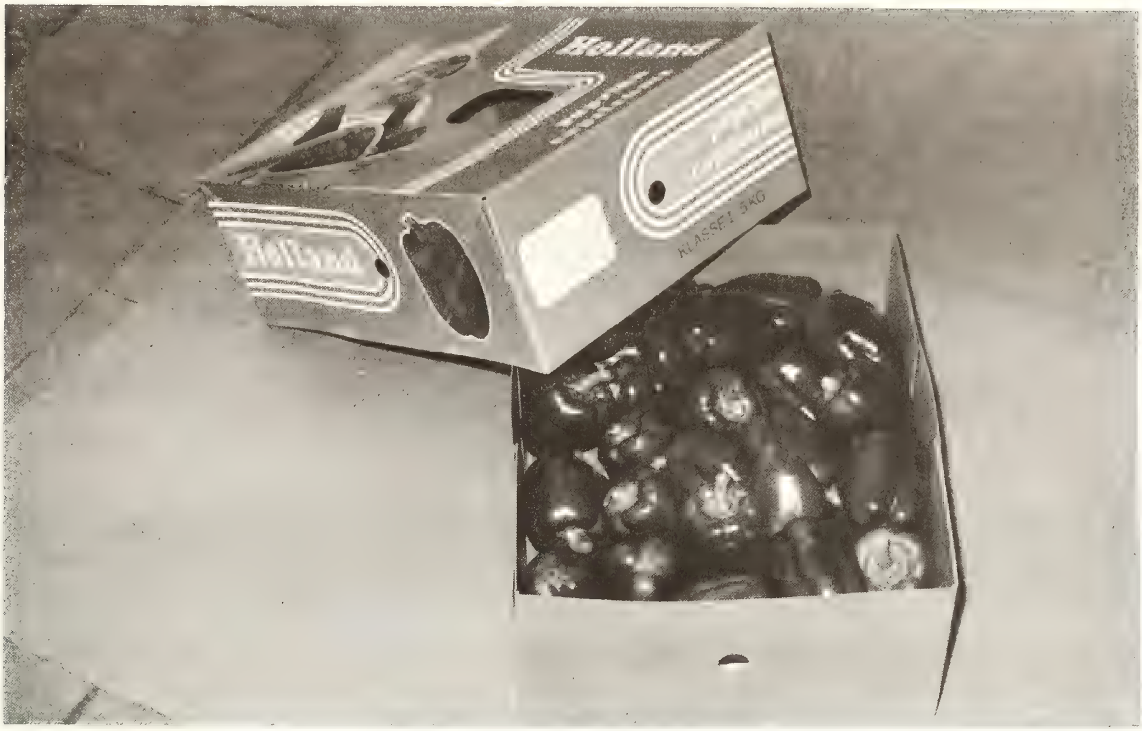

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Figure 5.— Typical Dutch export box used for sweet peppers. Fresh vegetables, such as cucumbers, eggplant, and carrots, are marketed in the same box, with a different color box for each product.

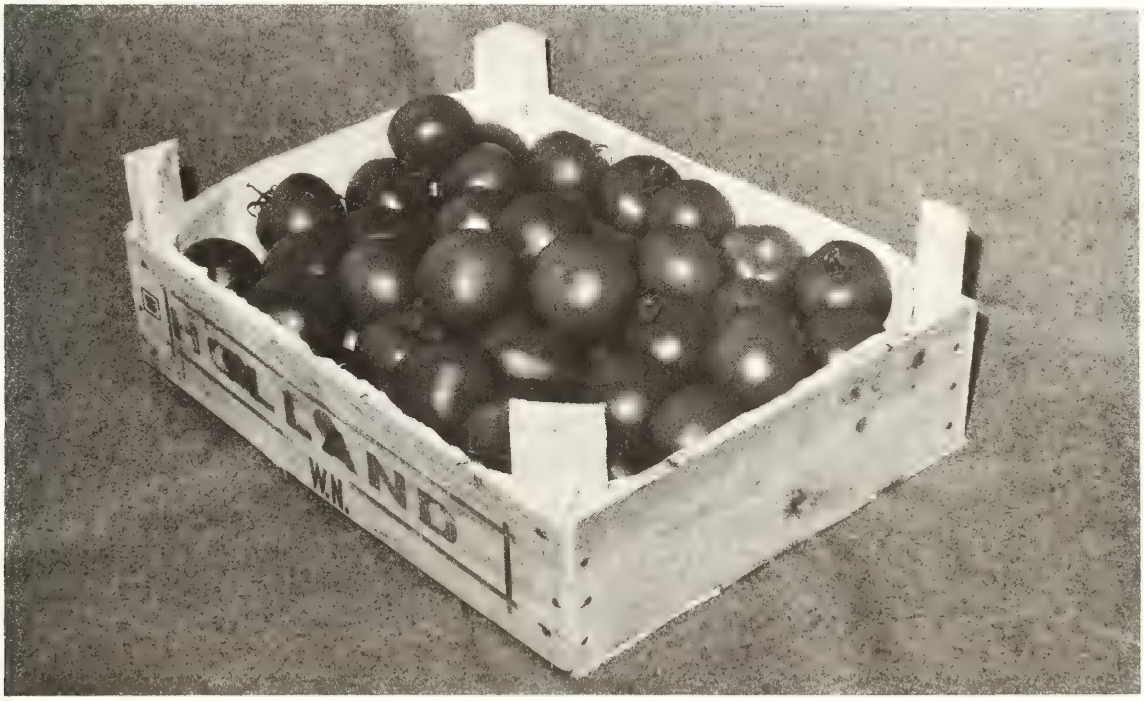

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Figure 6.— Dutch tomato tray. All Dutch tomatoes for export are marketed in trays. The net weight, 6 kg, has become nearly a standard for the western European tomato trade.

COMPARISON OF CONTAINERS WITH RECOMMENDED INTERNATIONAL STANDARD SIZE CONTAINERS

External dimensions of all containers used were compared with OECD (*5*) recommended container measurements (table 2). A tolerance of plus and minus 1 cm was used to measure variations. The OECD recommended sizes are 60 by 40, 50 by 30, and 40 by 30 cm for length and width.

The results show that 41.6 percent of all containers surveyed for length and 50.9 percent for width were within the OECD recommendations. The length-width combinations showed that 30.3 percent were within the recommendations. This indicated that most containers do not comply with the OECD standards for length and width.

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APPENDIX

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH FRUIT CONTAINERS												
Apples:												
France	FC	BX, TC	IT, WR	Place	8.5	7.6	41.5	31.5	23.0	40.0	30.5	22.0
	FC	BX, TC	LN, IT, WR	do	20.2	18.6	52.5	33.0	30.5	50.5	31.0	30.0
	FC	BX, TC	IT, WR	do	19.2	17.8	52.0	32.0	30.0	51.0	31.0	29.0
	WD	BX, NS	LN	Jumble	15.7	14.7	50.5	30.5	26.5	49.0	29.0	21.5
	WD	BX, NS	LN	do	14.0	12.1	50.5	30.0	27.0	47.0	29.0	23.5
	WD	TR, NS	PD	Place	6.9	5.9	58.0	34.0	13.0	57.0	33.0	12.0
Italy	WD	TR, NS	PD, IT	do	11.1	10.1	55.0	35.0	16.0	54.0	34.0	15.0
South Africa	FC	BX, SL	DV	do	19.0	18.0	51.0	31.5	28.0	50.0	31.0	27.5
	FC	BX, TC	IT, WR	do	21.0	19.0	51.5	32.0	30.5	49.5	29.5	29.5
Argentina	FC	BX, TC	IT, WR	do	21.7	19.6	52.5	33.0	32.0	50.0	31.0	30.0
	WD	BX, NS	LN, WR	do	23.6	20.4	54.5	32.5	32.0	51.0	31.0	30.5
Netherlands	FC	BX, SL	----	Jumble	10.2	9.5	46.0	27.5	23.0	45.0	26.5	22.0
Australia	FC	BX, SL	DV	Place	20.6	19.5	47.0	31.0	31.0	46.5	30.0	30.5
	FC	BX, SL	DV	do	19.1	18.0	49.0	33.0	29.0	48.0	32.5	28.0
New Zealand	FC	BX, TC	IT, WR	do	21.3	20.0	51.0	32.0	30.0	50.0	30.0	28.0
Belgium	WD	BX, NS	----	do	13.1	12.1	50.0	30.0	24.0	49.0	29.0	20.0
England	FC	BX, SL	DV	do	5.2	4.9	46.0	32.0	10.0	44.0	30.5	9.5
	FC	BX, SL	DV	do	16.2	15.2	40.0	30.5	30.0	39.5	30.0	29.5
	WD	BX, NS	LN, DV	do	16.2	14.2	47.5	34.0	24.5	46.5	33.5	20.0
	FC	BX, FL	IT	do	7.6	6.5	47.5	30.5	7.5	45.5	29.5	7.0
	WD	BX, NS	LN	Jumble	11.6	10.6	40.5	30.5	19.5	39.5	29.0	17.0
	FC	BX, SL	----	do	8.7	8.2	38.0	25.5	24.5	37.0	23.5	23.5
Avocados:												
Israel	FC	BX, FL	DV	Place	4.5	4.1	42.0	27.5	9.0	40.0	25.0	8.5
	FC	BX, TC	PD	do	7.9	7.5	40.0	30.0	16.5	38.0	28.5	15.5
South Africa	FC	BX, SL	DV, WR	do	4.5	4.1	43.5	31.5	8.0	42.5	30.5	7.5
	FC	BX, TC	WR	do	4.3	3.8	40.0	30.0	9.0	37.5	27.5	8.5
	FC	BX, TC	WR	do	3.3	3.0	44.0	27.5	6.5	40.5	25.5	6.0
	FC	BX, SL	DV, WR	do	3.1	2.7	42.5	26.5	7.0	41.0	26.0	6.0
Kenya	FC	BX, SL	DV	do	3.3	3.0	41.0	27.0	9.0	39.0	26.5	8.0
Morocco	FC	BX, TC	WR	do	4.2	3.8	43.5	29.5	9.0	40.5	27.0	8.0
Cherries:												
Italy	WD	TR, NS	LN	Jumble	6.1	5.1	39.0	21.0	15.5	38.0	20.0	10.0
	WD	TR, NS	----	do	8.2	7.3	51.0	31.0	12.0	50.0	30.0	7.0
	WD	BX, NS	LN	do	2.8	2.4	18.0	18.0	18.0	17.0	17.0	17.0
France	WD	TR, NS	LN	do	7.6	6.6	50.0	30.0	12.0	49.0	28.5	7.5
Belgium	WD	TR, NS	LN, PD	do	5.7	4.8	50.0	30.0	13.0	49.5	29.0	6.0
Cyprus	FC	BX, FL	LN, PD	do	3.4	3.0	30.5	24.0	10.5	30.0	21.0	10.0
Grapefruit:												
Israel	FC	BX, TC	----	Place	19.1	17.8	44.0	33.0	31.0	42.0	30.0	30.0
South Africa	FC	BX, TC	WR	do	15.7	14.7	39.5	28.5	28.0	38.5	26.0	25.5

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6] Gross	Weight[6] Net	Outside dimensions[6] Length	Outside dimensions[6] Width	Outside dimensions[6] Depth	Inside Dimensions[6] Length	Inside Dimensions[6] Width	Inside Dimensions[6] Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH FRUIT CONTAINERS—continued												
Grapefruit—Con.												
Cyprus	WD	BX, WB	WR	Place	18.0	15.3	48.0	31.0	30.5	42.5	30.0	30.0
	WD	BX, NS	WR	do	14.8	12.5	48.5	30.0	22.5	45.0	29.0	21.0
	FC	BX, TC	WR	do	18.1	16.9	47.5	32.0	30.0	45.0	29.0	29.0
	FC	BX, SL	WR	do	15.7	14.4	47.0	32.0	29.0	45.0	30.0	28.0
Argentina	WD	BX, WB	----	do	16.8	14.9	46.5	28.5	27.5	40.5	28.0	25.5
Honduras	FC	BX, TC	----	do	18.2	17.1	45.0	26.5	26.0	44.0	25.5	25.0
	FC	BX, TC	----	do	18.0	16.9	43.0	30.0	26.0	41.0	26.0	25.0
Mexico	FC	BX, TC	----	do	18.0	17.0	43.0	30.0	26.0	40.0	28.5	25.0
Paraguay	WD	BX, NS	WR	do	20.4	18.3	45.0	28.5	28.5	43.0	26.0	26.0
Turkey	FC	BX, TC	----	do	15.2	14.6	41.0	28.5	30.0	40.0	27.5	27.5
Uruguay	FC	BX, TC	----	do	15.8	14.8	44.0	30.0	27.0	42.0	26.0	25.0
Dominican Republic	FC	BX, TC	----	do	14.1	13.3	42.0	29.0	28.0	41.0	27.0	27.0
Grapes:												
Italy	WD	TR, NS	LN, DV	do	6.9	5.7	51.5	31.5	10.5	49.5	30.0	5.5
	WD	TR, NS	LN, DV	do	25.0	23.0	69.0	55.0	14.5	68.0	53.0	8.0
	WD	TR, NS	LN, DV	do	10.5	9.5	55.0	35.5	13.0	54.0	34.0	7.5
Spain	WD	TR, NS	LN	do	5.8	5.3	40.0	30.0	11.5	39.0	29.0	8.0
	WD	TR, NS	LN, WR	do	5.8	4.7	40.0	30.0	12.0	39.0	29.0	9.0
Greece	WD	TR, NS	LN, DV	do	10.0	8.8	49.5	34.0	14.5	48.0	33.0	8.0
South Africa	WD	BX, NS	LN, WR	do	6.6	5.0	46.0	30.5	13.0	43.0	29.0	11.5
	FC	BX, TC	LN, PD, WR	do	4.8	4.2	39.5	30.0	13.5	37.0	28.0	12.5
France	PE	TR, ----	DV	do	3.2	2.9	40.0	25.0	10.5	37.5	22.5	8.5
	WD	TR, NS	LN	do	9.8	9.2	57.0	33.5	12.5	56.0	32.5	8.0
	WD	TR, NS	LN	do	7.8	6.6	50.0	29.5	13.0	49.5	28.5	7.5
Romania	WD	TR, NS	LN	do	6.5	5.5	40.5	30.5	15.0	39.0	29.5	7.5
Netherlands	WD	TR, NS	LN, PD	do	4.5	3.8	40.0	29.5	14.5	38.0	29.0	9.0
Israel	FC	BX, FL	LN, DV	do	5.7	5.1	44.5	29.5	9.5	42.5	25.0	9.0
Lemons:												
Italy	FC	BX, TC	WR	do	14.7	13.6	44.0	30.0	23.5	42.5	28.0	22.5
	FC	BX, TC	WR	do	16.0	15.0	43.5	30.5	23.0	41.5	28.5	22.5
	FC	BX, SL	WR	do	9.4	8.8	51.0	31.5	13.0	50.0	30.5	12.0
	FC	BX, SL	NB	do	19.6	18.8	55.5	34.5	26.5	53.5	33.0	25.5
	FC	BX, SL	WR	do	6.8	5.9	43.0	29.0	11.0	42.0	28.0	10.0
	FC	BX, TC	WR	do	15.5	14.5	44.0	30.0	23.5	42.0	27.0	22.0
	FC	BX, SL	WR	do	14.0	13.2	44.0	28.5	23.5	42.5	28.0	22.0
Spain	FC	BX, TC	----	do	5.5	5.2	37.0	27.5	11.0	35.0	25.5	10.0
	FC	BX, TC	WR	do	7.3	6.9	37.5	28.0	12.0	37.0	27.0	11.0
	WD	TR, NS	LN	do	7.0	6.0	44.5	28.5	14.0	43.5	28.0	9.0
	WD	BX, NS	WR	do	8.0	7.0	28.5	27.5	20.5	26.0	26.0	19.0
	WD	BX, NS	WR	do	15.0	14.1	44.5	29.5	22.0	43.0	28.5	19.5
	WD	BX, WB	NB	do	15.9	14.4	40.0	30.5	30.5	35.5	30.0	30.0
	FC	BX, TC	WR	do	12.6	12.0	46.0	29.5	17.5	44.0	28.5	16.5
Turkey	WD	BX, NS	DV, WR	do	16.3	15.0	55.0	27.5	20.5	53.0	26.5	19.0
Greece	FC	BX, TC	WR	do	14.4	12.9	43.0	29.5	25.0	42.0	27.5	24.0
South Africa	FC	BX, TC	WR	do	17.4	16.3	39.5	28.5	29.0	38.0	25.5	25.5
Cyprus	FC	BX, SL	LN, WR	do	16.1	15.0	47.5	31.0	23.0	44.5	29.5	21.5
	FC	BX, TC	WR	do	15.8	15.2	46.0	32.0	24.0	45.0	31.0	22.5
	FC	BX, TC	WR	do	10.2	9.5	46.5	31.5	15.5	45.5	29.0	14.5
	FC	BX, TC	WR	do	16.2	15.2	46.0	31.0	23.0	44.5	29.0	21.0
Chile	WD	BX, NS	DV, WR	do	17.8	15.2	59.0	27.5	22.0	55.5	25.0	20.0
France	WD	BX, NS	----	do	10.9	10.2	50.0	30.0	17.5	49.0	29.0	11.5

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
				FRESH FRUIT CONTAINERS—continued								
Limes:												
Brazil	FC	BX, TC	----	Jumble	6.4	6.0	40.0	30.0	11.5	38.5	28.0	11.0
Honduras	FC	BX, TC	----	Place	4.2	3.9	33.5	27.0	10.0	31.5	26.5	9.0
Kenya	FC	BX, TC	----	do	2.8	2.5	30.0	22.5	12.5	28.5	20.0	12.0
Martinique	FC	BX, TC	----	do	8.0	7.5	43.0	31.0	15.0	40.5	27.5	14.0
	FC	BX, TC	----	do	14.1	13.4	53.0	37.0	16.0	50.0	35.0	15.0
Mexico	FC	BX, TC	----	do	5.4	4.8	35.0	31.0	10.5	33.5	27.0	10.0
South Africa	FC	BX, TC	PD	do	3.0	2.8	23.5	23.5	11.5	21.5	22.5	11.0
Mandarins:												
Morocco	WD	BX, WB	PD, WR	do	10.3	9.1	39.0	29.0	19.0	34.5	28.0	18.0
Italy	WD	TR, NS	LN, WR	do	10.0	9.0	51.0	30.0	12.5	49.0	29.5	11.5
	WD	BX, NS	LN, PD, WR	do	12.7	11.1	52.0	32.0	14.0	50.5	30.0	12.0
France	FC	BX, SL	DV	do	11.6	10.6	47.0	26.0	21.0	46.0	25.0	20.0
	FC	TR, SL	DV	do	8.0	7.5	50.0	30.0	15.0	48.5	29.0	12.0
Nectarines:												
Chile	WD	BX, NS	LN, PD, IT	do	5.4	4.4	44.5	35.0	9.5	41.5	33.5	7.0
Mozambique	FC	BX, TC	PD, WR	do	2.8	2.1	45.0	30.0	8.0	44.0	28.5	7.5
Spain	WD	TR, NS	IT	do	5.3	4.7	50.0	30.0	10.0	49.0	29.0	5.5
	WD	TR, NS	LN	do	5.4	5.0	40.0	30.0	11.0	39.0	29.0	8.0
Oranges:												
Spain	WD	BX, NS	WR	do	16.9	15.8	44.0	31.0	24.0	42.0	28.0	22.5
	WD	TR, NS	LN, WR	do	11.4	10.5	50.5	32.0	15.0	49.5	31.0	14.0
	WD	BX, NS	WR	do	17.4	16.1	44.0	29.5	25.5	43.5	29.0	24.0
	WD	BX, NS	WR	do	31.9	28.9	66.0	31.0	31.0	63.0	30.0	30.0
	WD	BX, WB	LN, WR	do	16.5	15.0	34.0	31.0	31.0	30.0	30.0	30.0
	FC	BX, SL	WR	do	17.3	16.1	44.0	30.0	26.0	43.5	29.5	25.5
Israel	WD	BX, WB	WR	do	23.1	21.0	48.0	31.0	31.5	42.5	30.0	29.5
	FC	BX, TC	----	do	19.1	17.8	44.0	32.0	31.0	42.0	30.0	30.0
South Africa	FC	BX, TC	WR	do	17.3	16.3	39.0	29.5	27.5	37.0	26.5	26.0
Morocco	WD	BX, WB	WR	do	15.4	14.0	38.5	29.0	29.5	35.0	28.0	27.5
	FC	BX, SL	WR	do	16.6	15.1	49.0	29.0	24.5	48.0	28.0	23.5
Italy	FC	TR, SL	WR	do	11.2	10.8	52.0	31.0	17.0	50.0	29.5	14.0
Brazil	WD	BX, WB	WR	do	18.3	16.6	47.0	27.0	27.0	42.0	26.0	26.0
Cyprus	FC	BX, TC	WR	do	15.4	14.7	47.0	31.0	23.5	45.0	29.0	22.0
Greece	WD	CR, NS	LN	Jumble	16.4	14.2	50.0	31.0	26.0	49.0	30.5	25.0
Algeria	FC	TR, FL	LN, WR	Place	9.2	8.6	49.5	30.0	15.0	47.0	27.0	14.0
	WD	BX, WB	----	do	16.3	14.8	35.0	31.0	31.0	30.5	30.0	29.5
Egypt	FC	BX, TC	WR	do	16.9	15.8	44.0	31.0	24.0	42.0	28.0	22.5
Tunisia	WD	BX, WB	LN	do	16.4	15.3	36.0	31.5	31.5	32.0	30.5	29.5
	WD	BX, WB	LN, WR	do	16.1	14.7	36.0	31.0	31.0	32.0	30.0	30.0
Peaches:												
Italy	WD	TR, NS	IT	do	6.0	5.2	55.0	35.5	9.0	54.0	34.0	5.0
Greece	WD	TR, NS	PD	do	4.5	3.5	48.5	28.0	10.0	45.5	26.5	4.5
France	WD	TR, NS	DV, PD	do	4.9	4.0	57.0	34.0	9.5	56.0	33.0	6.0
	FC	TR, FL	IT	do	4.0	3.3	50.0	29.0	8.5	49.0	28.0	6.0
	WD	TR, NS	IT, PD	do	4.4	3.6	50.0	30.0	10.0	49.0	29.0	6.0
South Africa	WD	BX, NS	PD, WR	do	3.4	1.3	46.0	30.5	10.5	43.0	29.0	9.0
Uruguay	FC	BX, TC	PD	do	4.5	4.2	53.0	31.5	8.0	49.0	31.0	7.5

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH FRUIT CONTAINERS—continued												
Pears:												
Italy	WD	TR, NS	LN	Jumble	14.6	13.6	51.0	31.0	20.5	49.5	29.5	14.0
	WD	TR, NS	IT	Place	7.0	6.0	55.5	35.5	10.0	54.0	34.0	5.0
	WD	TR, NS	IT	do	9.2	8.0	51.0	30.5	16.0	49.5	29.0	10.0
	FC	BX, TC	LN, IT, WR	do	8.8	8.1	51.5	33.0	14.0	49.0	30.0	12.0
	FC	TR, RG	LN, IT	do	5.2	4.8	50.5	31.0	10.0	49.0	30.5	9.5
France	WD	TR, NS	LN, DV, PD	do	4.7	4.3	50.0	29.5	9.5	49.0	28.5	5.5
Netherlands	FC	BX, SL	----	Jumble	16.5	16.0	41.0	31.5	27.0	40.5	30.5	26.5
	WD	TR, NS	LN	Place	7.5	6.5	40.0	29.5	15.5	38.0	28.5	14.0
England	FC	BX, SL	DV	do	12.5	11.5	41.0	30.5	23.5	40.0	29.0	22.0
	WD	BX, NS	LN, PD	Jumble	11.6	10.6	40.5	30.5	19.5	39.5	29.0	17.0
Plums:												
Italy	WD	TR, NS	LN	do	10.3	9.5	44.0	24.0	19.5	43.0	23.0	13.5
	WD	TR, NS	PD, Cups	Place	9.5	8.3	54.0	35.0	15.5	53.0	34.0	9.5
	WD	TR, NS	LN, PD	Jumble	13.5	12.3	54.0	35.0	15.5	53.0	34.0	9.5
Spain	WD	TR, NS	LN, PD	do	5.3	4.7	39.0	29.0	12.0	38.0	27.5	8.0
South Africa	FC	BX, TC	LN, PD, WR	Place	3.3	2.8	46.0	31.0	6.5	44.0	28.5	6.0
	WD	BX, NS	LN, PD, WR	do	7.3	6.6	46.5	30.5	10.5	43.0	29.0	8.0
France	WD	TR, NS	LN, PD	Jumble	6.8	6.0	50.5	29.5	12.0	49.5	28.5	8.0
Belgium	WD	TR, NS	Cups	Place	6.5	5.6	50.0	30.0	13.0	49.5	29.0	6.0
Chile	WD	BX, NS	IT	do	3.5	2.5	45.0	35.0	8.0	41.0	34.0	6.0
England	WD	TR, NS	----	Jumble	6.3	5.5	41.0	30.0	11.0	40.0	29.0	7.5
	WD	TR, NS	----	do	6.6	5.9	41.0	35.5	13.0	38.5	29.5	8.0
Strawberries:												
Belgium	WD	TR, NS	Cups	Place	3.3	2.4	50.0	29.5	12.0	49.0	29.0	6.0
Netherlands	FC, PNS	TR, RG	do	do	2.6	2.2	50.0	30.0	10.0	48.5	28.5	5.5
France	WD	TR, NS	do	do	5.8	5.0	56.5	33.0	12.0	55.5	32.0	7.0
	WD	TR, NS	do	do	4.6	4.0	50.0	30.0	12.0	49.0	28.0	8.0
Israel	FC	BX, TC	do	do	2.8	2.2	55.0	30.0	6.5	54.0	27.5	6.0
Mexico	FC	TR, FL	do	do	3.7	2.8	48.0	31.5	6.5	45.0	31.0	6.0
Morocco	FC	BX, TC	do	do	2.8	2.2	55.0	30.0	6.5	54.0	27.5	6.0
South Africa	PE	BX-----	do	do	5.0	3.0	43.0	30.0	28.0	40.5	28.0	25.0
England	FC	BX, SL	do	do	3.3	2.9	49.0	27.5	10.0	48.5	27.0	9.5
	FC	TR, FL	do	do	5.4	4.9	61.0	41.0	11.5	57.0	40.0	9.5
	FC	BX, SL	do	do	2.6	2.0	41.0	30.5	9.5	39.0	30.0	9.0
	FC	TR, NS	do	do	2.7	1.8	40.5	30.0	10.5	39.5	29.0	7.0
FRESH VEGETABLE CONTAINERS												
Artichokes:												
Spain	WD	CR, NS	LN	Place	7.3	6.2	37.0	30.0	20.0	36.0	29.0	18.0
	WD	CR, NS	LN	do	10.4	8.2	50.5	30.5	20.0	49.5	29.5	18.5
Asparagus:												
France	FC	BX, SL	----	do	9.4	8.8	40.0	20.0	22.5	39.0	19.5	20.5
	WD	CR, NS	LN	do	14.3	13.5	58.0	26.0	19.0	56.0	24.5	18.0
	FC	BX, SL	LN	do	6.4	6.0	39.5	24.5	14.0	39.0	24.0	13.5
England	WD	CR, NS	LN	do	5.9	4.3	47.0	30.5	13.5	44.0	29.5	10.0
	WD	TR, NS	----	do	4.7	3.6	41.0	31.0	13.0	40.0	30.0	7.5
	FC	BX, SL	PD	do	4.8	4.4	51.0	35.5	10.0	49.5	32.5	9.5
Beans (green):												
Italy	WD	TR, NS	----	do	10.1	9.0	51.0	31.0	19.0	50.0	29.0	15.0
Spain	WD	TR, NS	LN	do	8.7	7.5	48.0	38.0	14.0	47.0	37.0	10.0

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH VEGETABLE CONTAINERS—continued												
Beans (green)—Con.												
Netherlands	WD	TR, NS	LN	do	5.2	4.1	43.0	30.5	13.0	40.5	29.0	12.5
Egypt	FC	BX, TC	----	Jumble	6.1	5.5	54.0	32.0	13.5	52.0	31.0	12.0
Senegal	FC	BX, TC	----	Place	3.3	2.9	40.0	29.5	8.5	37.5	27.5	7.5
	FC	BX, FL	DV	do	5.6	5.1	43.5	33.0	12.5	41.0	29.5	12.0
	WD	BX, NS	LN	do	5.5	5.1	34.0	27.0	17.5	33.0	26.0	16.5
	FC	BX, FL	----	do	6.1	5.5	51.0	30.0	12.0	47.0	28.5	11.5
	WD	BX, WB	LN	do	6.0	5.0	50.0	26.0	14.5	44.0	23.0	12.0
Kenya	FC	BX, FL	LN	do	2.8	2.5	30.0	21.5	12.0	29.0	18.5	11.0
Upper Volta	FC	BX, TC	----	do	10.7	9.8	40.5	30.0	23.0	39.0	27.0	22.0
	FC	BX, TC	----	do	5.3	4.8	43.0	32.5	10.0	40.5	30.5	9.0
Niger	FC	BX, FL	LN	do	4.4	3.9	40.5	33.0	10.5	39.5	29.5	10.0
Broccoli:												
Italy	WD	BX, NS	----	do	10.2	8.7	50.0	38.0	25.0	48.0	36.0	23.0
	WD	TR, NS	----	do	13.6	12.6	48.5	37.5	22.5	47.5	36.5	12.5
Spain	WD	TR, NS	LN, PD	do	3.6	3.0	43.0	31.0	12.5	42.0	29.5	9.5
Carrots:												
Netherlands	FC	BX, SL	LN	Jumble	11.4	10.5	46.0	25.0	22.0	44.5	24.0	21.0
	FS	BX, TC	----	Place	11.8	11.0	48.0	35.0	12.0	45.5	34.0	11.0
Italy	WD	TR, NS	----	Jumble	8.3	7.0	40.5	31.0	15.0	39.5	30.0	10.0
France	PNS	Bag ---	----	do	10.0	9.9	58.0	37.0	----	----	----	----
	WD	BX, NS	----	do	13.6	12.0	50.0	30.5	17.5	49.0	29.0	14.5
	WD	BX, NS	LN	do	14.0	13.0	44.0	34.0	16.5	42.0	31.0	15.0
Cyprus	PNS	Bag ---	----	do	27.3	27.0	70.0	40.0	----	----	----	----
Cauliflower:												
France	WD	CR, NS	----	Place	23.1	21.7	60.0	39.0	36.5	58.5	37.0	35.5
	WD	BX, NS	WR	do	10.2	9.1	60.0	40.0	19.0	59.0	39.0	17.5
	FC	BX, SL	DV, WR	do	7.1	6.4	54.0	37.5	18.0	53.0	36.5	16.5
Italy	WD	CR, NS	----	do	15.6	14.5	51.0	40.0	32.0	50.0	39.0	28.0
England	FC	BX, SL	----	do	10.9	10.0	52.0	33.0	30.0	51.5	32.5	29.5
Celery:												
England	FC	BX, SL	SV	do	14.0	13.1	47.5	25.5	32.0	46.5	24.0	31.0
	FC	BX, FL	SV	do	8.6	7.9	50.0	33.0	19.0	48.5	32.0	18.5
France	WD	TR, NS	SV	do	10.2	9.4	57.0	33.5	15.5	56.0	32.5	10.5
Israel	FC	BX, TC	SV	do	12.6	11.7	40.0	30.0	30.5	38.0	27.0	28.0
Spain	WD	BX, NS	SV	do	15.0	13.4	50.0	27.0	35.0	49.5	26.0	33.0
	FC	BX, SL	SV	do	7.9	7.4	27.0	24.0	35.0	26.0	23.0	34.0
	WD	BX, WB	DV, SV	do	13.4	12.0	54.0	26.0	37.0	49.0	24.0	36.0
	FC	BX, SL	DV, SV	do	10.7	9.8	47.5	24.0	33.0	47.0	23.5	32.0
Chinese cabbage:												
Austria	FC	BX, FL	----	do	16.4	15.3	59.5	40.5	20.5	56.0	39.0	20.0
	WD	CR, NS	----	do	19.9	17.7	59.0	39.0	28.0	58.0	38.0	25.0
	FC	TR, FL	----	do	10.1	9.5	55.0	40.0	16.0	54.0	35.5	15.0
Israel	FC	BX, TC	----	do	8.0	7.0	40.0	30.0	28.0	38.0	28.0	27.0
Eggplant:												
Spain	WD	TR, NS	LN, PD, WR	do	4.7	3.9	43.0	32.0	12.0	41.5	30.5	7.5
Guadeloupe	FC	BX, TC	WR	do	7.3	6.8	37.0	30.0	20.0	35.5	28.5	18.5
	FC	BX, TC	WR	do	9.3	8.6	44.0	35.5	17.5	42.0	33.0	16.5
Netherlands	FS	BX, TC	PD	do	5.8	5.0	42.0	33.0	15.0	41.5	32.5	14.5
Martinique	FC	BX, TC	WR	do	6.3	5.8	42.5	33.5	15.0	40.5	27.5	14.0
Canary Islands	FC	BX, TC	LN	do	6.0	5.4	41.5	32.0	18.5	40.0	30.0	17.0

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH VEGETABLE CONTAINERS—continued												
Eggplant—Con.												
France	WD	TR, NS	PD	Place	5.9	5.2	50.0	29.5	15.0	48.5	28.5	9.5
Kenya	FC	BX, TC	----	do	4.7	4.2	40.0	27.0	16.0	38.5	23.5	15.5
Muskmelons:												
France	WD	TR, NS	LN, PD	do	6.4	5.6	44.5	30.0	14.5	43.5	29.0	11.0
Israel	FC	BX, TC	DV	do	11.5	10.5	59.5	39.5	15.0	57.5	34.0	14.5
	FC	BX, TC	WR	do	5.4	4.9	39.5	30.5	11.5	37.0	27.5	10.5
	FC	BX, TC	PD	do	5.7	5.1	43.5	32.0	13.5	42.0	28.0	12.5
El Salvador	FC	BX, TC	DV	do	12.1	11.0	43.0	39.0	17.5	41.0	37.5	16.5
Senegal	FC	BX, TC	----	do	4.5	4.0	40.0	30.0	8.5	38.0	27.5	8.0
	FC	BX, TC	DV	do	7.7	6.7	50.0	36.0	13.5	45.5	34.5	13.0
Spain	FC	BX, TC	DV	do	10.9	10.2	52.0	39.0	14.5	47.0	37.0	13.0
	WD	TR, NS	LN, DV	do	11.3	9.9	43.0	41.0	18.0	41.5	40.0	10.0
	WD	TR, NS	PD	do	11.8	10.5	43.0	40.0	18.0	41.5	39.0	10.0
	WD	TR, NS	PD	do	11.9	10.6	50.0	36.5	17.0	49.0	36.0	10.0
	WD	TR, NS	LN, PD	do	9.0	8.0	50.0	40.0	13.0	49.0	39.5	8.5
	WD	TR, NS	PD, WR	do	7.2	6.4	50.0	30.0	16.0	49.0	29.0	11.0
	WD	BX, NS	PD	do	20.5	15.8	70.0	43.0	18.5	67.0	42.0	15.5
Onions:												
Netherlands	Jute	Bag	----	Jumble	25.1	24.8	79.0	46.0	----	----	----	----
Spain	PNS	do	----	do	23.3	23.1	84.0	43.0	----	----	----	----
Italy	Jute	do	----	do	9.9	9.7	63.0	32.0	----	----	----	----
France	PNS	do	----	do	10.1	10.0	58.0	37.0	----	----	----	----
	Jute	do	----	do	9.6	9.4	53.0	34.5	----	----	----	----
Peppers (hot):												
France	WD	TR, NS	----	do	4.3	3.5	49.5	29.5	13.0	49.0	28.5	8.0
Kenya	FC	BX, SL	----	do	4.5	3.9	45.0	29.0	15.0	44.0	28.0	14.0
	FC	BX, SL	----	do	5.0	4.5	45.0	29.0	15.5	44.0	28.0	15.0
	FC	BX, TC	----	do	4.1	3.7	40.0	29.0	17.5	39.0	26.0	17.0
Rwanda	WD	BX, WB	LN, DV	do	5.6	5.0	36.0	25.0	18.0	35.0	23.5	16.0
Peppers (sweet):												
Italy	WD	TR, NS	----	do	3.3	2.9	41.0	31.0	11.0	40.0	30.0	6.0
	WD	TR, NS	----	do	7.7	7.0	51.0	31.0	18.0	50.0	30.0	12.5
	FC	BX, SL	----	Place	6.5	6.0	50.5	31.0	17.0	49.5	28.5	16.0
	FC	BX, TC	LN, PD	do	9.0	8.0	50.0	31.0	21.5	47.0	29.0	20.0
Netherlands	FS	BX, TC	----	Jumble	5.9	5.2	41.5	33.0	15.5	41.0	32.0	15.0
Bulgaria	FC	BX, SL	LN	Place	6.3	5.5	45.0	32.5	18.0	44.5	31.5	17.5
Israel	FC	BX, SL	PD	Jumble	6.2	5.3	40.0	30.0	24.0	37.5	26.0	22.5
Spain	WD	BX, NS	LN	do	5.5	4.8	50.0	30.0	19.0	49.0	29.0	14.5
	FC	BX, TC	----	Place	6.5	6.0	45.5	32.0	19.0	44.0	29.5	18.0
Morocco	WD	BX, NS	LN, PD	do	6.8	5.6	50.0	32.5	18.5	47.5	30.5	16.0
Canary Islands	FC	BX, TC	PD	Jumble	6.5	5.7	42.0	33.0	19.5	40.5	30.5	19.0
	FC	BX, TC	----	Place	5.0	4.6	40.0	32.5	12.5	39.5	28.0	11.5
	FC	BX, TC	PD	do	6.6	6.0	42.0	32.0	17.5	39.0	30.0	17.0
Senegal	FC	BX, SL	----	do	6.2	5.7	39.0	29.0	24.0	38.0	28.0	23.5
France	WD	TR, NS	----	Jumble	5.9	5.0	50.0	29.5	16.0	49.0	29.0	10.5
Kenya	FC	BX, TC	----	do	4.8	4.4	40.0	30.0	17.0	39.0	27.5	16.5
	FC	BX, FL	----	do	5.2	4.4	44.5	32.0	16.0	43.5	29.0	15.5
	FC	BX, SL	----	Place	5.8	5.2	45.5	30.0	15.5	44.0	28.5	15.0
Mali	FC	BX, TC	----	do	7.0	6.5	51.0	31.0	17.0	50.0	30.0	16.5
Rwanda	WD	BX, WB	----	do	13.2	12.6	47.5	34.0	24.0	45.5	33.0	23.0

See footnotes at end of table.

TABLE 1.—*Fresh fruit and vegetable containers appearing at 4 major European terminal markets, 1975*—Continued

Commodity and country of origin[1]	Construction material[2]	Type[3] and style[4]	Packaging accessories[5]	Pack	Weight[6]		Outside dimensions[6]			Inside dimensions[6]		
					Gross	Net	Length	Width	Depth	Length	Width	Depth
					Kg	*Kg*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*	*Cm*
FRESH VEGETABLE CONTAINERS—continued												
Peppers (sweet)—Con.												
Jordan	FC	BX, FL	----	do	6.0	5.5	42.0	32.0	17.0	40.5	29.0	16.0
England	FC	BX, SL	----	Jumble	4.6	4.1	44.5	30.5	16.0	44.0	30.0	15.5
	FC	BX, SL	----	do	3.9	3.5	40.0	30.0	15.5	38.5	28.0	15.0
	FC	BX, FL	----	do	3.1	2.9	37.5	27.0	17.0	35.5	25.5	15.5
Brazil	FC	BX, TC	----	Place	4.7	3.9	46.5	31.5	12.0	44.0	29.0	11.0
Radishes:												
England	FC	BX, SL	RB	do	3.3	2.7	38.0	27.0	13.0	36.0	26.0	12.5
France	WD	TR, NS	PD, RB	do	5.3	4.3	51.0	30.5	15.0	50.0	29.5	13.5
Germany	FC	TR, FL	RB	do	6.4	5.9	39.0	29.5	14.0	38.5	28.5	10.0
Spain	WD	TR, NS	PB	do	9.9	9.0	50.0	32.5	15.5	49.0	31.5	9.5
Tomatoes:												
Netherlands	WD	TR, NS	LN	Jumble	6.6	5.5	39.5	30.0	14.5	38.0	29.0	14.0
Morocco	FC	BX, TC	DV, PD	Place	7.2	6.5	50.0	30.0	11.5	45.5	27.5	11.0
	WD	BX, NS	LN, PD	do	11.5	10.1	48.5	31.5	24.0	46.0	27.0	23.0
	WD	TR, NS	LN	do	8.4	7.8	50.0	30.0	14.5	46.0	29.0	12.0
	FC	TR, TC	LN, DV	do	6.3	5.5	48.5	28.0	12.0	47.5	26.0	11.5
Canary Islands	FC	BX, TC	DV, PD, WR	do	6.7	6.2	46.5	31.5	12.0	40.5	29.0	10.5
	FC	BX, TC	LN, WR	do	3.8	3.5	33.5	24.0	11.5	32.0	20.0	9.5
Spain	WD	TR, NS	LN	do	6.0	5.4	40.0	30.0	14.5	39.0	29.0	10.0
	WD	TR, NS	----	Jumble	6.5	6.0	38.0	28.5	14.0	37.5	28.0	10.5
	WD	BX, NS	LN, PD, WR	Place	6.7	5.4	43.0	28.0	15.5	39.5	26.0	14.0
	WD	TR, NS	LN, PD, WR	do	6.8	5.6	43.0	31.5	13.0	42.0	30.0	7.5
	WD	TR, NS	----	do	6.4	5.8	43.0	32.5	11.5	41.5	32.0	9.0
France	WD	TR, NS	PD	do	10.1	9.1	50.0	30.0	16.0	49.0	29.0	10.5
	FC	TR, FL	----	do	6.5	6.0	40.0	30.0	12.5	38.0	28.5	12.0
	WD	TR, NS	PD	do	6.8	6.1	57.0	34.0	11.0	56.0	33.0	7.0
England	FC	BX, TC	----	Jumble	5.4	5.0	39.0	27.5	12.5	37.5	25.0	12.0
	FC	TR, FL	----	do	5.6	5.1	38.5	28.5	12.0	37.0	27.5	11.5
	FS	BX, FL	----	do	5.9	5.4	43.0	21.0	13.0	42.0	20.5	12.5
	WD	TR, NS	----	do	6.2	5.1	41.0	30.5	12.0	39.0	29.0	7.5
Israel	FC	BX, SL	LN	do	6.2	6.0	37.5	29.5	15.5	37.0	29.0	15.0
	FC	BX, TC	DV	Place	6.8	6.2	44.0	32.0	12.5	41.0	27.5	12.0
Senegal	FC	BX, TC	----	do	7.6	6.6	46.5	36.0	13.5	44.5	34.5	12.0
Germany	FC	TR, FL	----	Jumble	6.4	5.9	39.0	29.5	13.0	38.5	28.5	7.5
Watermelons:												
Spain	WD	TR, NS	PD	Place	15.4	14.0	43.0	40.5	21.0	42.0	39.5	18.0
Italy	FC	BX, SL	DV	do	19.0	18.1	60.0	40.0	19.0	59.0	39.0	18.0
	FC	BX, SL	PD	do	11.7	10.7	54.0	31.5	20.0	52.0	30.5	18.0
	FC	BX, SL	PD	do	17.5	16.3	42.0	41.5	22.5	40.0	40.0	21.5
	FC	BX, SL	DV	do	22.0	20.6	61.0	40.5	22.0	60.0	40.0	20.0
Israel	FC	BX, TC	DV	do	14.0	13.8	50.0	40.0	22.5	48.0	36.0	21.5

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[1] Listed in order of volume exported to the EEC, except under limes, nectarines, broccoli, celery, Chinese cabbage, and muskmelons, where countries are listed alphabetically.

[2] FC = fiberboard corrugated; FS = fiberboard solid; PE = plastic expanded; PNS = plastic nonexpanded solid; WD = wood.

[3] BX = box; CR = crate; TR = tray.

[4] FL = folded; NS = nailed-stapled; RG = ready-glued; SL = slotted; TC = telescope; WB = wirebound.

[5] DV = divider; IT = interior tray; LN = liner; NB = net bag; PB = poly bag; PD = pad; RB = rubberband; SV = sleeves; WR = wrap.

[6] Average value of 3 container measurements.

TABLE 2.—*Comparison of external length, width, and length-width combinations with OECD recommendations for external dimensions*

OECD recommendations	Containers complying with OECD recommendations	Proportion of total containers
	Number	*Percent*
Length (cm):		
40	55	18.3
50	61	20.3
60	9	3.0
Total	125	41.6
Width (cm):		
30	135	44.9
40	18	6.0
Total	153	50.9
Length-width (cm):		
60 by 40	8	2.7
50 by 30	42	14.0
40 by 30	41	13.6
Total	91	30.3

Glossary[1]

Container types:

Box – Rigid container with closed faces.[2]

Container – In general, any receptacle or enclosure used in packaging and shipping.

Crate – Rigid container of framed construction joined together with nails, bolts, or any equivalent fastening; framework may or may not be enclosed with sheathing.

Tray – Shallow, lidless container.[3]

Fiberboard container styles:

Folder – Usually only one piece of fiberboard; bottom of the box is hinged to form two or all sidewalls and the cover. The box can be set up without stitching or taping. Locking tabs, handles, display panels, and so forth can be incorporated into the design.

Ready-glued – Basically one piece of fiberboard; is shipped flat and ready to use by simply setting it up.

Rigid – Two separate endpieces and a body; requires stitching or similar operation before it can be used.

Slide – Several pieces of liners and sleeves sliding in different directions into each other; also includes outside sleeves for other boxes.

Slotted – Basically one piece of fiberboard with a stitched, taped, or glued manufacturer's joint and top and bottom flaps; shipped flat, ready to use, and requires closing by using the flap provided.

Telescope – More than one piece of fiberboard; characterized by a lid, bottom, or both that telescopes over the body of the box.

Wood container styles:

Nailed-stapled – Several pieces of skeletons or boards joined together with nails or staples.

Wirebound – Several pieces of skeletons or boards joined together with wire stapled to face boards.

Pack arrangement:

Jumble pack – Random filling of produce into a container.

Place pack – Manually placing produce in a specific pattern into a container.

Packaging accessories:

Divider – Device made of various materials that separates the space within a container into two or more spaces, cells, compartments, or layers; dividers may be plain, interlocking, scored, horizontal, vertical, or diagonal; their primary purpose is to separate the articles, furnish cushioning, or both.

Interior tray – Type of interior packing made of corrugated or solid paperboard or other material, consisting of a sheet with four edges creased and turned up at right angles to support an object or to separate one surface from another.

Liner – Generally any liner or nonadhered lining material that separates a product within a container from its basic walls.

Pad – Cushion.

– Corrugated or solid fiberboard sheet or other material used for extra protection or for separating tiers or layers of articles when packed for shipment.

Wrap – Sheet of flexible material, such as paper, foil film, or lamination, used to cover or infold a product for storage, shipment, or sale.

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[1] See Literature Cited references 1, 4, and 6.

[2] Closed enough to prevent the contents, for which the container was designed, from falling out.

[3] The height does not exceed half the width; otherwise the container is classified as a box or crate.

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